

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF APS/GPS TO THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 117 AND MD 124 IN MONTGOMERY COUNTY. MD 124 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA SEVEN-PHASE, SEMI-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE LEFT TURN PHASE FOR BOTH APPROACHES OF MD 117 AND FOR THE SOUTHBOUND APPROACH OF MD 124. MD 117 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY AS WILL THE THROUGH MOVEMENT OF MD 124. THERE IS A PEDESTRIAN PHASE FOR THE WEST LEG OF THE INTERSECTION CROSSING MD 117 AND THERE ARE ALTERNATE PEDESTRIAN PHASES FOR THE NORTH AND SOUTH LEGS OF THE INTERSECTION CROSSING MD 124.

EQUIPMENT LIST FOR CONTRACT NO. XY2385185

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

CATEGORY CODE	QUANTITY	UNIT	DESCRIPTION
900000	43	SF	SHEET ALUMINUM GROUND MOUNTED SIGN
	4	EA	W11-2 (30" x 30")
	3	EA	W16-7pL (24" x 12")
	1	EA	W16-7pR (24" x 12")
	1	EA	M3-3 (24" x 12")
	1	EA	M1-5 (30" x 24")
	1	EA	M6-1 (21" x 15")
900000	6	SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN
	6	EA	R10-3(1) (9' x 15") POLE MOUNTED

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

CATEGORY CODE	QUANTITY	UNIT	DESCRIPTION
100000	1	EA	MAINTENANCE OF TRAFFIC (PER INTERSECTION)
201032	20	CY	CLASS 2 EXCAVATION
203030	2	CY	TEST PIT EXCAVATION
585617	56	LF	5 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585621	853	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	190	LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585700	1333	LF	REMOVAL OF EXISTING PAVEMENT MARKING LINES, ANY WIDTH
600000	341	LF	TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH
600000	48	LF	TYPE A CURB ANY HEIGHT OR DEPTH
655105	1957	SF	5 INCH CONCRETE SIDEWALK
655120	140	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
704345	90	SY	PLACING FURNISHED TOPSOIL 4 INCH DEPTH
705500	90	SY	TURFGRASS ESTABLISHMENT
800000	1	EA	2-WIRE APS CENTRAL CONTROL UNIT
800000	6	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
800000	6	EA	5 FOOT OR 10 FOOT PEDESTAL POLE WITH BREAKAWAY COUPLINGS, FOUNDATION & GROUND ROD
800000	6	EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	1	EA	REMOVE & DISPOSE OF EXISTING SIGNAL EQUIPMENT (PER SIGNALIZED INTERSECTION LOCATION)
800000	125	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
800000	402	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
800000	49	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
800000	1	EA	THIRD PARTY CONCRETE TESTING (PER INTERSECTION)
801130	5	EA	SQUARE PERFORATED TUBULAR STEEL SIGN POSTS
801135	5	EA	SQUARE TUBULAR STEEL ANCHOR BASES
802501	530	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
811001	2	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
861105	1033	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	1066	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

C. EQUIPMENT TO BE REMOVED.

ALL EXISTING SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL.

CONTACTS

Ms. Anyesha Mookherjee  
Assistant District Engineer - Traffic  
Phone: (301) 513-7358

Mr. Tom Fountain  
Assistant District Engineer - Maintenance  
Phone: (301) 513-7304

Mr. Victor Grafton  
Utility Engineer  
Phone: (301) 513-7350

Mrs. Corren Johnson  
Chief, Traffic Operations Division  
Phone: (410) 787-7630

Mr. Edward Rodenhizer  
Manager, Signal Operations  
Phone: (410) 787-7650

Mr. Sonny Bailey  
Manager, Sign Operations  
Phone: (410) 787-7676

Mr. Mike Stocker  
OOTs, Signal Warehouse  
Phone: (410) 787-7696

Mr. Kamal Hamud  
Team Leader, Traffic Signals  
Montgomery County DOT  
Division of Traffic Engineering and Operations  
Phone: (240) 777-8761

Mr. Bob Ricketts  
Supervisor, Montgomery Technical Center  
Montgomery County DOT  
Division of Traffic Engineering and Operations  
Phone: (240) 876-3681

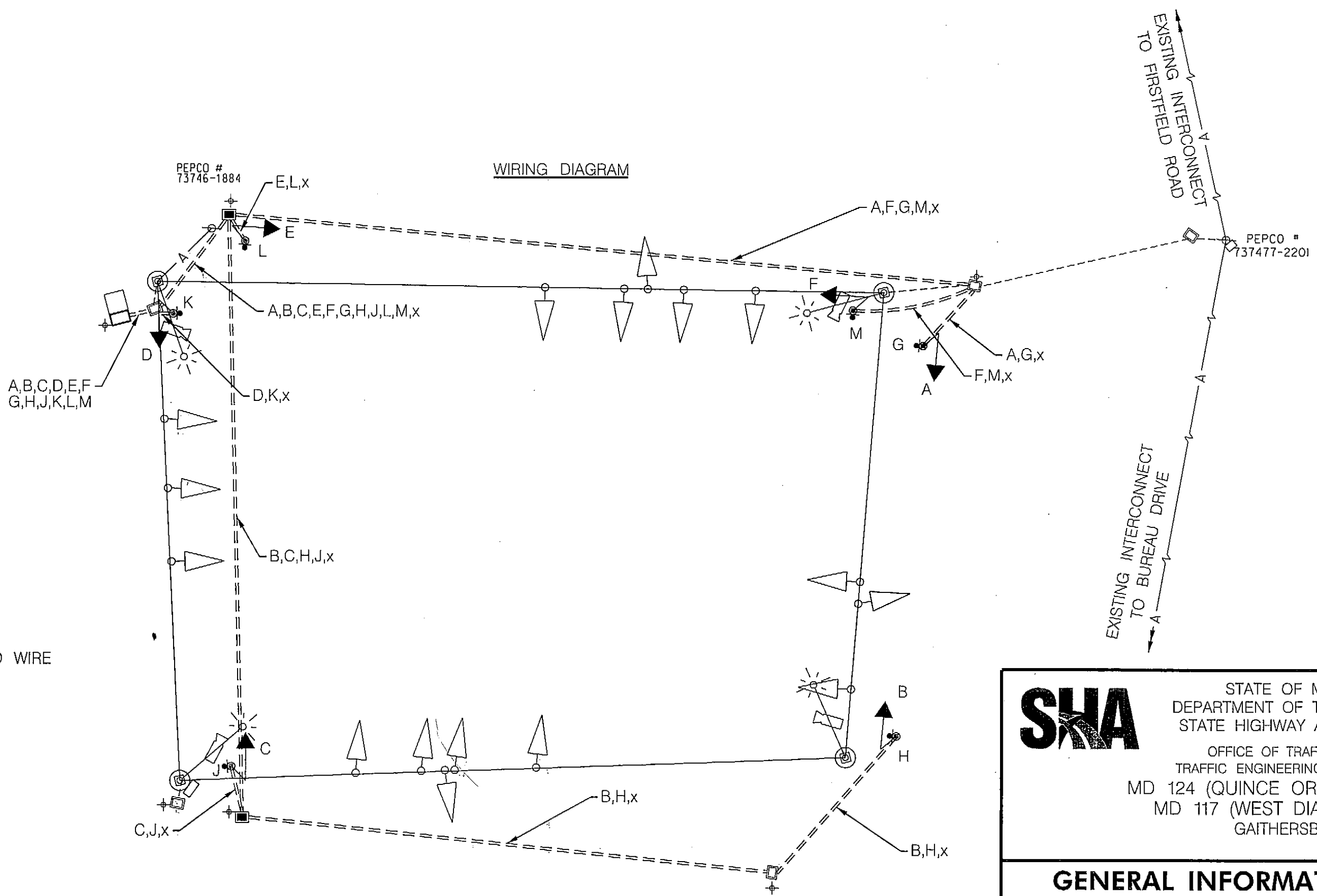
PHASE CHART

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R						
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y						
G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G						

MD 124 ASSUMED TO RUN IN  
A NORTH/SOUTH DIRECTION

PHASE 2 AND 5	R	R	←G	←G	G	G	←R	←R	←R	R	R	←R	←R	←R	R	R	DW	DW	DW	DW	DW	DW	
2 AND 5 CHANGE	R	R	←Y	←Y	G	G	←R	←R	←R	R	R	←R	←R	←R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 2 AND 6	G	G	←R	←R	G	G	←R	←R	←R	R	R	←R	←R	←R	R	R	DW	DW	DW	DW	WK	WK	
PED CLEARANCE	G	G	←R	←R	G	G	←R	←R	←R	R	R	←R	←R	←R	R	R	DW	DW	DW	DW	FL/DW	FL/DW	
2 AND 6 CHANGE	Y	Y	←R	←R	Y	Y	←R	←R	←R	R	R	←R	←R	←R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 3 AND 8	R	R	←R	←R	R	R	←R	←R	←R	R	R	←G	←G	←G	G	G	DW	DW	DW	DW	DW	DW	
3 AND 8 CHANGE	R	R	←R	←R	R	R	←R	←R	←R	R	R	←Y	←Y	←Y	G	G	DW	DW	DW	DW	DW	DW	
PHASE 4 AND 8	R	R	←R	←R	R	R	←R	←R	←R	G	G	←R	←R	←R	G	G	DW	DW	DW	DW	DW	DW	
4 AND 8 CHANGE	R	R	←R	←R	R	R	←R	←R	←R	G	G	←R	←R	←R	Y	Y	DW	DW	DW	DW	DW	DW	
PHASE 4 ALT AND 8 ALT	R	R	←R	←R	R	R	←R	←R	←R	G	G	←R	←R	←R	G	G	WK	WK	WK	WK	DW	DW	
PED CLEARANCE	R	R	←R	←R	R	R	←R	←R	←R	G	G	←R	←R	←R	G	G	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	
4 ALT AND 8 ALT CHANGE	R	R	←R	←R	R	R	←R	←R	←R	G	G	←R	←R	←R	Y	Y	DW	DW	DW	DW	DW	DW	
PHASE 4 AND 7	R	R	←R	←R	R	R	←G	←G	←G	G	G	←R	←R	←R	R	R	DW	DW	DW	DW	DW	DW	
4 AND 7 CHANGE	R	R	←R	←R	R	R	←Y	←Y	←Y	Y	Y	←R	←R	←R	R	R	DW	DW	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	

MD 124 ASSUMED TO RUN IN  
A NORTH/SOUTH DIRECTION



WIRING KEY  
A,B,C } 5 CONDUCTOR ELECTRICAL CABLE  
D,E,F } (NO. 14 AWG)  
G,H,J } 2 CONDUCTOR ELECTRICAL CABLE  
K,L,M } (NO. 14 AWG)  
x } STRANDED BARE COPPER GROUND WIRE  
(NO. 6 AWG)  
+ } GROUND ROD

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 124 (QUINCE ORCHARD ROAD) AND  
MD 117 (WEST DIAMOND AVENUE)  
GATHERSBURG, MD

GENERAL INFORMATION PLAN SHEET

SCALE NONE ADVERTISED DATE 08/2013 CONTRACT NO. XY2385185

DESIGNED BY JC COUNTY MONTGOMERY  
DRAWN BY JC LOGMILE 150117.26  
CHECKED BY RM TMS NO. M055  
F.A.P. NO. TOD NO.

TS NO. 2027B-GI DRAWING SG-3 OF 3 SHEET NO. 3 OF 3

BRUDIS & ASSOCIATES, INC.  
Consulting Engineers  
8240 Rumsey Road, Suite C  
Columbia, Maryland 21045  
Phone 410-864-3027  
www.brudis.com

PLOTTED: Wednesday, August 21, 2013 AT 06:12 PM  
FILE: P:\08-002 TEDD\Task 135 MD 117 Signal\Drawings\CADD\Working\9\_MDI176\MD124\pSG-P003\_MDI176\MD124.dgn

BY: fanyong